

IN THE CLAIMS:

1.—15. (Canceled)

16. (Currently Amended) A method for loosening a threaded connection on a tubular member, comprising:

lowering a back-off tool through the tubular member to a position substantially proximate the threaded connection, wherein the back-off tool comprises two or more sonic wave generators, each having at least one of a piezoelectric ceramic and a stack of piezoelectric plates; and

activating the two or more sonic wave generators simultaneously to cause the sonic wave generator to generate sonic waves; and

setting the tubular member to a neutral weight position at the threaded connection above a sticking condition.

17. (Original) The method of claim 16, wherein the sonic waves are configured to loosen the threaded connection.

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Original) The method of claim 16, further comprising applying a reverse torque to the tubular member.

22. (Canceled)

23. (Original) The method of claim 16, wherein the back-off tool is activated while moving a neutral weight position up and down the tubular member.

24. (Previously Presented) A method for loosening a threaded connection on a tubular member, comprising:

lowering a back-off tool through the tubular member to a position substantially proximate the threaded connection, wherein the back-off tool comprises a sonic wave generator having at least one of a piezoelectric ceramic and a stack of piezoelectric plates; and

activating the sonic wave generator to generate sonic waves while reciprocating the tubular member.

25. (Canceled)

26. (Previously Presented) A method for backing-off an upper portion of a tubular member joined to a lower portion of the tubular member by a threaded connection in a wellbore, comprising:

applying a reverse torque to the upper portion of the tubular member;

lowering a back-off tool through the tubular member to a position substantially proximate the threaded connection, wherein the back-off tool comprises a sonic wave generator having at least one of a piezoelectric ceramic and a stack of piezoelectric plates; and

generating sonic waves through the back-off tool to loosen the threaded connection, while moving a neutral weight position along the tubular member.

27. (Cancelled)

28. (Original) The method of claim 26, further comprising activating the back-off tool to generate the sonic waves.

29. (Previously Presented) The method of claim 26, further comprising setting the tubular member to the neutral weight position at the threaded connection above a sticking condition.

30. (Cancelled)

31. (Canceled)

32. (Original) The method of claim 26, further comprising varying one or more frequencies of the sonic waves.

33. (Original) The method of claim 26, further comprising retrieving the upper portion from the wellbore.

34–40. (Canceled)

41. (Previously Presented) A method for loosening a threaded connection on a tubular member, comprising:

lowering a back-off tool through the tubular member to a position substantially proximate the threaded connection, wherein the back-off tool comprises a sonic wave generator having at least one of a piezoelectric ceramic and a stack of piezoelectric plates; and

activating the back-off tool to cause the sonic wave generator to generate sonic waves, while moving a neutral weight position up and down the tubular member.

42. (Canceled)

43. (Canceled)

44. (New) A method for loosening a threaded connection on a tubular member, comprising:

lowering a back-off tool through the tubular member to a position substantially proximate the threaded connection, wherein the back-off tool comprises two or more sonic wave generators, each having at least one of a piezoelectric ceramic and a stack of piezoelectric plates; and

activating the two or more sonic wave generators simultaneously to cause the sonic wave generator to generate sonic waves,

wherein the back-off tool is activated while moving a neutral weight position up and down the tubular member.

45. (New) The method of claim 44, wherein the sonic waves are configured to loosen the threaded connection.

PATENT
Atty. Dkt. No. WEAT0393

46. (New) The method of claim 44, further comprising applying a reverse torque to the tubular member.